

THE OFFICE OF REGULATORY STAFF
SURREBUTTAL TESTIMONY & EXHIBITS
OF
ZACHARY J. PAYNE

MARCH 26, 2018



DOCKET NO. 2017-292-WS

**Application of Carolina Water Service, Incorporated for
Approval of an Increase in Its Rates for Water and Sewer
Services**

SURREBUTTAL TESTIMONY AND EXHIBITS OF
ZACHARY J. PAYNE
ON BEHALF OF
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
DOCKET NO. 2017-292-WS
IN RE: APPLICATION OF CAROLINA WATER SERVICE,
INCORPORATED FOR APPROVAL OF AN INCREASE IN ITS
RATES FOR WATER AND SEWER SERVICES

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND
OCCUPATION.**

A. My name is Zachary J. Payne. My business address is 1401 Main Street,
Suite 900, Columbia, South Carolina, 29201. I am employed by the South Carolina
Office of Regulatory Staff (“ORS”) in the Audit Department as a Senior Auditor.

**Q. ARE YOU THE SAME ZACHARY PAYNE WHO PRESENTED DIRECT
TESTIMONY IN THIS DOCKET?**

A. Yes, I pre-filed direct testimony reflecting ORS findings in this proceeding
on March 12, 2018.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to certain issues raised
in the rebuttal testimonies of Carolina Water Service, Inc. (“CWS” or “Company”)
witnesses Robert Hunter, Michael Cartin, and Bob Gilroy. My surrebuttal will
address the Company’s issues with ORS adjustment 9c proposed for deferred

1 purchased water, ORS adjustment 9d proposed to normalize sludge hauling expense,
2 ORS adjustment 16 proposed for rate case expenses, and ORS adjustment 32c
3 proposed for general ledger additions that excluded costs for the Friarsgate
4 equalization basin ("EQ") liner. My surrebuttal will also address components of the
5 information presented in Robert Hunter's rebuttal testimony regarding the impact of
6 the Tax Cut and Jobs Act on the Company's rates.

7 **Q. WHAT IS ORS'S POSITION REGARDING THE DEFERRED**
8 **PURCHASED WATER ADJUSTMENT UPDATE PROPOSED BY MR.**
9 **HUNTER IN HIS REBUTTAL TESTIMONY?**

10 **A.** Prior to ORS filing direct testimony, the Company had provided
11 documentation sufficient to support a purchased water deferral balance of
12 \$573,101. This is the same deferral balance referenced on page 8, line 9 of my direct
13 testimony filed March 12, 2018. On March 22, 2018, the Company provided
14 documentation in support of a purchased water deferral balance of \$669,808. ORS
15 did not have sufficient time to review and verify this supporting documentation
16 provided by the Company prior to the filing of my surrebuttal testimony. ORS will
17 review this information prior to the hearing.

18 **Q. WHAT IS ORS'S POSITION REGARDING THE NORMALIZED SLUDGE**
19 **HAULING EXPENSE ADJUSTMENT ADDRESSED BY MR. GILROY IN**
20 **HIS REBUTTAL TESTIMONY?**

21 **A.** ORS adjustment 9d was proposed to normalize sludge hauling expense for
22 the Friarsgate and Watergate business units ("BUs"). ORS's review of the test year
23 and the two previous years ended August 31st, indicated a larger than normal

1 increase in sludge hauling expenses during the test year for these two BUs. It is
2 ORS's opinion that the test year sludge hauling amounts are atypical, and do not
3 indicate future trends. Based on the review, ORS noted the following:

Annual Sludge Hauling Expense for Friarsgate and Watergate				
	Expense for 12 Months Ended 8/31/15	Expense for 12 Months Ended 8/31/16	Expense for 12 Months Ended 8/31/17	3 Year Average Annual Expense
Friarsgate	\$99,197	\$127,426	\$212,226	\$146,283
Watergate	\$25,370	\$25,797	\$72,007	\$41,058

4 ORS used the three year average annual expense in the table above to calculate
5 ORS adjustment 9d in the amount of (\$96,892), as it more closely represents a
6 typical year, and normalizes the Company's operating experience used for setting
7 rates for customers going forward. "When an unusual situation exists for utility
8 ratemaking purposes resulting in test year figures that are atypical and thus do not
9 indicate future trends, Public Service Commission ("PSC") should adjust test year
10 data." *Porter v. South Carolina Public Service Comm'n*, 328 S.C. 222, 493 S.E.2d
11 92 (1997).

12 **Q. WHAT IS ORS'S POSITION REGARDING THE RATE CASE EXPENSE**
13 **ADJUSTMENT UPDATE PROPOSED BY MR. HUNTER IN HIS**
14 **REBUTTAL TESTIMONY?**

15 **A.** Prior to ORS filing direct testimony, the Company had provided
16 documentation sufficient to support \$47,546 in current rate case expenses. This is
17 the same amount for current rate case expenses referenced on page 11, line 10 of
18 my direct testimony filed March 12, 2018. On March 22, 2018, the Company

provided additional documentation to support current rate case expenses totaling \$88,500. Due to the timeline for filing surrebuttal, ORS does not have sufficient time to review and verify this latest information provided by the Company. ORS recognizes that the Company will continue to incur expenses up to and through the hearing. ORS does not object to an additional update to rate case expenses subject to ORS verification.

Q. WHAT IS ORS'S POSITION REGARDING THE FRIARSGATE EQUALIZATION BASIN LINER PROJECT THAT MR. CARTIN PROPOSES TO INCLUDE IN THE ADJUSTMENT TO GROSS PLANT IN SERVICE FOR PLANT ADDITIONS IN HIS REBUTTAL TESTIMONY?

A. Mr. Cartin proposes to include in rate base, as part of ORS adjustment 32c, costs incurred through February 12, 2018 relating to the removal and replacement of the EQ liner at the Friarsgate wastewater treatment facility. The new EQ liner currently remains under construction. Therefore, it is not used and useful or providing service to customers, and costs associated with removal and replacement of the EQ liner, should not be included in the calculation of rates to be charged to customers in this docket.

Q. DID ORS REVIEW THE INFORMATION PRESENTED BY THE COMPANY ON THE IMPACT OF THE TAX CUT AND JOBS ACT TO THE COMPANY'S RATES?

A. Yes. This section of my surrebuttal testimony addresses ORS's position related to the Company's proposal to create an excess Accumulated Deferred

1 Income Tax ("ADIT") liability, the protected and unprotected components of the
2 liability, and the amortization of the excess ADIT liability.

3 ORS agrees with the Company's proposal to create an excess ADIT liability
4 that represents the portion of ADIT that has been collected from ratepayers but is
5 no longer to be paid by the Company in taxes due to lower federal tax rates. ORS
6 agrees with the Company's position that this excess ADIT liability should be split
7 into protected and unprotected components, so that each component can be
8 amortized in a manner that most accurately reflects the benefit the Company will
9 realize, which should be passed on to ratepayers.

10 ORS has not had sufficient time to verify the Company's calculation of the
11 balance of protected excess ADIT or the calculation of a 56 year weighted average
12 life associated with the protected excess ADIT, but accepts the Company's proposal
13 for this docket. ORS also accepts the Company's proposal to amortize the
14 unprotected excess ADIT over 3 years, although ORS also has not had sufficient
15 time to verify the Company's calculation of the unprotected excess ADIT liability
16 balance. However, it is ORS's opinion that ratepayers are due a return of monies
17 collected for taxes that will no longer be paid by the Company as a result of the Tax
18 Cut and Jobs Act. Although ORS accepts the Company's calculations of the
19 protected and unprotected excess ADIT balances and the 56 year weighted average
20 useful life for protected excess ADIT currently, ORS recognizes that these excess
21 ADIT balances and the calculation of the weighted average life may need to be
22 trued up in a future docket.

1 **Q. WHAT ORS ADJUSTMENTS ARE NECESSARY TO REFLECT THE**
2 **IMPACT OF THE TAX CUT AND JOBS ACT ON THE COMPANY'S**
3 **OPERATING EXPERIENCE, RATE BASE AND RATE OF RETURN?**

4 **A.** The adjustments are as follows:

- 5 • **ORS Adjustment A – Amortization of Excess Tax Collection** – ORS
6 proposes an adjustment of \$422,475 to the Company's revenue. This
7 adjustment reflects the 3 year amortization of the \$1,267,425 excess tax
8 collection liability created by adjustment F. This adjustment is discussed in
9 further detail in the surrebuttal testimony of ORS Utility Rates Department
10 witness Matthew Schellinger.
- 11 • **ORS Adjustment B – Amortization of Excess ADIT Liability** – ORS and the
12 Company propose an adjustment of (\$136,924) to reflect the annual
13 amortization of protected and unprotected excess ADIT liabilities created by
14 adjustments D and E. The protected excess ADIT liability amount of
15 (\$2,978,710) is amortized over 56 years resulting in an annual amortization of
16 (\$53,191). The unprotected excess ADIT liability amount of (\$251,199) is
17 amortized over 3 years resulting in an annual amortization of (\$83,733).
- 18 • **ORS Adjustment C – Accumulated Deferred Income Taxes** – ORS and the
19 Company propose an adjustment of \$3,229,909 to remove from existing ADIT
20 the amount of excess ADIT liabilities created by the Tax Cut and Jobs Act.
- 21 • **ORS Adjustment D – Excess ADIT Liability – Protected** – ORS proposes an
22 adjustment of (\$2,925,519) to create a net excess ADIT liability for protected
23 asset classes. The adjustment amount reflects the balance of the (\$2,978,710)

liaibility proposed by the Company less one year's amortization expense of (\$53,191) included in adjustment B.

- **ORS Adjustment E – Excess ADIT Liability – Unprotected** - ORS proposes an adjustment of (\$167,466) to create a net excess ADIT liability for unprotected asset classes. The adjustment amount reflects the balance of the (\$251,199) liability proposed by the Company less one year's amortization expense of (\$83,733) included in adjustment B.
- **ORS Adjustment F – Excess Tax Collection Liability** - ORS proposes an adjustment of (\$844,950) to the Company's rate base. This adjustment reflects the balance of \$1,267,425 less one year of amortization, for excess tax collection which ORS estimates to be the amount of excess tax collection the Company should collect from January 1, 2018 through May 10, 2018 from customers due to current customer rates having been calculated using a 35% federal tax rate. ORS proposes to amortize this liability over 3 years and the annual amortization of \$422,475 is addressed in ORS adjustment A. This adjustment is discussed in further detail in the surrebuttal testimony of ORS Utility Rates Department witness Matthew Schellinger.

To reflect the impact of the Tax Cut and Jobs Act on the Company's operating experience, rate base and rate of return, ORS has included Audit Surrebuttal Exhibits ZJP-1 through ZJP-9. These exhibits follow the same format as the exhibits filed on March 12, 2018 along with my direct testimony. These exhibits include ORS adjustments A-F presented above, which have been highlighted on ORS Audit Surrebuttal Exhibits ZJP-1 through ZJP-5.

1 As a result of ORS adjustments A-F, several adjustments proposed by ORS
2 in my direct testimony filed March 12, 2018 have changed. These adjustments
3 include adjustment 25b utility commission taxes, adjustment 26 income taxes -
4 state, adjustment 27 income taxes - federal, adjustment 30 customer growth, and
5 adjustment 37 interest expense. These adjustments are also reflected in Audit
6 Surrebuttal Exhibits ZJP-1 through ZJP-9.

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 **A. Yes.**

Carolina Water Service, Inc.
Operating Experience, Rate Base and Rate of Return
Combined Operations - Water and Sewer Service Territory 1 & 2
Docket No. 2017-292-WS
Test Year Ended August 31, 2017

Description	(1) Application Per Books \$	(2) Accounting & Pro Forma Adjustments \$	(3) After Accounting & Pro Forma Present \$	(4) Proposed Increase \$	(5) After Proposed Increase \$
<u>Operating Revenues</u>					
Service Revenues - Water	10,351,801	445,276 (1)	10,797,077	2,394,421 (38)	13,191,498
Service Revenues - Sewer	10,602,605	(1,660,950) (2)	8,941,655	2,292,098 (39)	11,233,753
Miscellaneous Revenues	474,882	22,313 (3)	497,195	35,576 (40)	532,771
Amortization of Excess Tax Collection	0	422,475 (A)	422,475	0	422,475
Uncollectible Accounts	(309,649)	15,394 (4)	(294,255)	(53,292) (41)	(347,547)
Total Operating Revenues	21,119,639	(755,492)	20,364,147	4,668,803	25,032,950
<u>Maintenance Expenses</u>					
Salaries and Wages	2,565,425	134,298 (5)	2,699,723	0	2,699,723
Capitalized Time	(525,777)	(15,911) (6)	(541,688)	0	(541,688)
Purchased Power	895,192	(75,032) (7)	820,160	0	820,160
Purchased Water and Sewer	3,313,014	598,804 (8)	3,911,818	0	3,911,818
Maintenance and Repair	2,232,236	(32,474) (9)	2,199,762	0	2,199,762
Maintenance Testing	265,450	(8,831) (10)	256,619	0	256,619
Meter Reading	110,205	(25) (11)	110,180	0	110,180
Chemicals	487,720	(87,780) (12)	399,940	0	399,940
Transportation	206,630	(1,065) (13)	205,565	0	205,565
Operating Exp. Charged to Plant	0	0	0	0	0
Total Maintenance Expenses	9,550,095	511,984	10,062,079	0	10,062,079
<u>General Expenses</u>					
Salaries and Wages	700,280	(72,820) (14)	627,460	0	627,460
Office Supplies & Other Office Exp	416,692	(112,585) (15)	304,107	0	304,107
Regulatory Commission Exp.	318,145	(229,367) (16)	88,778	0	88,778
Pension & Other Benefits	763,625	55,633 (17)	819,258	0	819,258
Rent	25,580	(178) (18)	25,402	0	25,402
Insurance	312,963	(20,955) (19)	292,008	0	292,008
Office Utilities	599,990	(59,574) (20)	540,416	0	540,416
Outside Services	281,034	(8,435) (21)	272,599	0	272,599
Non-Utility Misc Income	0	0	0	0	0
Miscellaneous	34,173	(114,681) (22)	(80,508)	0	(80,508)
Total General Expenses	3,452,482	(562,962)	2,889,520	0	2,889,520
Depreciation	1,717,514	(83,079) (23)	1,634,435	0	1,634,435
Amortization of CIAC	(416,355)	10,505 (24)	(405,850)	0	(405,850)
Taxes Other Than Income	2,925,145	104,091 (25)	3,029,236	24,473 (42)	3,053,709
Income Taxes - State	177,733	(96,502) (26)	81,231	225,370 (43)	306,601
Income Taxes - Federal	1,074,691	(750,583) (27)	324,108	899,227 (44)	1,223,335
Amortization of Excess ADIT Liability	0	(136,924) (B)	(136,924)	0	(136,924)
Sale of Utility Property	(29,323)	29,323 (28)	0	0	0
Amort. Investment Tax Credit	(8,853)	0	(8,853)	0	(8,853)
Amortization of PAA	(17,129)	1,756 (29)	(15,373)	0	(15,373)
Total Other Expenses	5,423,423	(921,413)	4,502,010	1,149,070	5,651,080
Total Operating Expenses	18,426,000	(972,391)	17,453,609	1,149,070	18,602,679
Net Operating Income	2,693,639	216,899	2,910,538	3,519,733	6,430,271
Customer Growth	0	28,803 (30)	28,803	38,335 (45)	67,138
Interest During Construction	(89,608)	89,608 (31)	0	0	0
Net Income (Loss) For Return	2,783,247	156,094	2,939,341	3,558,068	6,497,409
<u>Original Cost Rate Base:</u>					
Gross Plant In Service	101,446,033	(6,274,846) (32)	95,171,187	0	95,171,187
Accumulated Depreciation	(15,938,540)	2,949,621 (33)	(12,988,919)	0	(12,988,919)
Net Plant In Service	85,507,493	(3,325,225)	82,182,268	0	82,182,268
Deferred Charges	0	0	0	0	0
Cash Working Capital	1,625,322	(6,372) (34)	1,618,950	0	1,618,950
Contributions In Aid of Construction	(21,662,799)	732,675 (35)	(20,930,124)	0	(20,930,124)
Accumulated Deferred Income Taxes (ADIT)	(7,539,471)	3,229,909 (C)	(4,309,562)	0	(4,309,562)
Excess ADIT Liability - Protected	0	(2,925,519) (D)	(2,925,519)	0	(2,925,519)
Excess ADIT Liability - Unprotected	0	(167,466) (E)	(167,466)	0	(167,466)
Excess Tax Collection Liability	0	(844,950) (F)	(844,950)	0	(844,950)
Customer Deposits	(336,522)	-	(336,522)	0	(336,522)
Advances in Aid of Construction	0	-	0	0	0
Plant Acquisition Adjustment	(892,626)	32,541 (36)	(860,085)	0	(860,085)
Total Rate Base	56,701,397	(3,274,407)	53,426,990	0	53,426,990
Return on Rate Base	4.91%		5.50%		12.16%
Operating Margin	4.88%		6.13%		19.20%
Interest Expense	1,752,211	(60,934) (37)	1,691,277	0	1,691,277

Carolina Water Service, Inc.
Operating Experience, Rate Base and Rate of Return
Water Service Territory 1
Docket No. 2017-292-WS
Test Year Ended August 31, 2017

	(1)	(2)	(3)	(4)	(5)	
Description	Application Per Books \$	Accounting & Pro Forma Adjustments \$	After Accounting & Pro Forma Present \$	Proposed Increase \$	After Proposed Increase \$	
Operating Revenues						
Service Revenues - Water	5,452,075	346,907	(1)	5,798,982	1,376,052 (38)	7,175,034
Miscellaneous Revenues	77,994	38,775	(3)	116,769	5,679 (40)	122,448
Amortization of Excess Tax Collection	0	123,539	(A)	123,539	0	123,539
Uncollectible Accounts	(74,834)	(4,612)	(4)	(79,446)	(23,464) (41)	(102,910)
Total Operating Revenues	5,455,235	504,609		5,959,844	1,358,267	7,318,111
Maintenance Expenses						
Salaries and Wages	734,418	147,974	(5)	882,392	0	882,392
Capitalized Time	(152,357)	(22,727)	(6)	(175,084)	0	(175,084)
Purchased Power	98,484	0	(7)	98,484	0	98,484
Purchased Water and Sewer	1,584,518	507,467	(8)	2,091,985	0	2,091,985
Maintenance and Repair	238,310	157,941	(9)	396,251	0	396,251
Maintenance Testing	47,105	0	(10)	47,105	0	47,105
Meter Reading	27,157	0	(11)	27,157	0	27,157
Chemicals	171,165	0	(12)	171,165	0	171,165
Transportation	65,923	(338)	(13)	65,585	0	65,585
Operating Exp. Charged to Plant	0	0		0	0	0
Total Maintenance Expenses	2,814,723	790,317		3,605,040	0	3,605,040
Salaries and Wages	223,895	(3,616)	(14)	220,279	0	220,279
Office Supplies & Other Office Exp	140,296	(1)	(15)	140,295	0	140,295
Regulatory Commission Exp.	89,055	(61,357)	(16)	27,698	0	27,698
Pension & Other Benefits	244,150	21,219	(17)	265,369	0	265,369
Rent	882	0	(18)	882	0	882
Insurance	100,059	0	(19)	100,059	0	100,059
Office Utilities	171,113	0	(20)	171,113	0	171,113
Outside Services	93,301	0	(21)	93,301	0	93,301
Non-Utility Misc Income	0	0		0	0	0
Miscellaneous	10,937	(35,694)	(22)	(24,757)	0	(24,757)
Total General Expenses	1,073,688	(79,449)		994,239	0	994,239
Depreciation	408,320	3,174	(23)	411,494	0	411,494
Amortization of CIAC	(153,614)	(11,458)	(24)	(165,072)	0	(165,072)
Taxes Other Than Income	941,798	(386,060)	(25)	555,738	7,120 (42)	562,858
Income Taxes - State	57,365	(39,998)	(26)	17,367	65,731 (43)	83,098
Income Taxes - Federal	352,610	(283,317)	(27)	69,293	262,266 (44)	331,559
Amortization of Excess ADIT Liability	0	(36,529)	(B)	(36,529)	0	(36,529)
Sale of Utility Property	(9,565)	9,565	(28)	0	0	0
Amort. Investment Tax Credit	(3,746)	0		(3,746)	0	(3,746)
Amortization of PAA	(13,504)	341	(29)	(13,163)	0	(13,163)
Total Other Expenses	1,579,664	(744,282)		835,382	335,117	1,170,499
Total Operating Expenses	5,468,075	(33,414)		5,434,661	335,117	5,769,778
Net Operating Income	(12,840)	538,023		525,183	1,023,150	1,548,333
Customer Growth	0	8,225	(30)	8,225	16,025 (45)	24,250
Interest During Construction	(37,304)	37,304	(31)	0	0	0
Net Income (Loss) For Return	24,464	508,944		533,408	1,039,175	1,572,583
Original Cost Rate Base:						
Gross Plant In Service	23,487,720	457,867	(32)	23,945,587	0	23,945,587
Accumulated Depreciation	(4,854,113)	672,263	(33)	(4,181,850)	0	(4,181,850)
Net Plant In Service	18,633,607	1,130,130		19,763,737	0	19,763,737
Deferred Charges	0	0		0	0	0
Cash Working Capital	486,051	88,859	(34)	574,910	0	574,910
Contributions In Aid of Construction	(8,705,515)	(293,006)	(35)	(8,998,521)	0	(8,998,521)
Accumulated Deferred Income Taxes	(2,037,503)	924,175	(C)	(1,113,328)	0	(1,113,328)
Excess ADIT Liability - Protected	0	(845,326)	(D)	(845,326)	0	(845,326)
Excess ADIT Liability - Unprotected	0	(42,320)	(E)	(42,320)	0	(42,320)
Excess Tax Collection Liability	0	(247,078)	(F)	(247,078)	0	(247,078)
Customer Deposits	(96,794)	0		(96,794)	0	(96,794)
Advances in Aid of Construction	0	0		0	0	0
Plant Acquisition Adjustment	(639,510)	0	(36)	(639,510)	0	(639,510)
Total Rate Base	7,640,336	715,434		8,355,770	0	8,355,770
Return on Rate Base	0.32%			6.38%		18.82%
Operating Margin	-8.44%			4.51%		17.87%
Interest Expense	484,978	(220,469)	(37)	264,509	0	264,509

Carolina Water Service, Inc.
Operating Experience, Rate Base and Rate of Return
Water Service Territory 2
Docket No. 2017-292-WS
Test Year Ended August 31, 2017

Description	(1) Application Per Books \$	(2) Accounting & Pro Forma Adjustments \$	(3) After Accounting & Pro Forma Present \$	(4) Proposed Increase \$	(5) After Proposed Increase \$
Operating Revenues					
Service Revenues - Water	4,899,726	98,369 (1)	4,998,095	1,018,369 (38)	6,016,464
Miscellaneous Revenues	87,878	29,988 (3)	117,866	8,203 (40)	126,069
Amortization of Excess Tax Collection	0	106,812 (A)	106,812	0	106,812
Uncollectible Accounts	(97,600)	(1,862) (4)	(99,462)	(22,128) (41)	(121,590)
Total Operating Revenues	4,890,004	233,307	5,123,311	1,004,444	6,127,755
Maintenance Expenses					
Salaries and Wages	605,795	98,618 (5)	704,413	0	704,413
Capitalized Time	(121,565)	(15,005) (6)	(136,570)	0	(136,570)
Purchased Power	174,030	0 (7)	174,030	0	174,030
Purchased Water and Sewer	698,309	91,377 (8)	789,686	0	789,686
Maintenance and Repair	393,248	41,193 (9)	434,441	0	434,441
Maintenance Testing	91,976	0 (10)	91,976	0	91,976
Meter Reading	44,640	0 (11)	44,640	0	44,640
Chemicals	45,389	0 (12)	45,389	0	45,389
Transportation	43,956	(218) (13)	43,738	0	43,738
Operating Exp. Charged to Plant	0	0	-	0	-
Total Maintenance Expenses	1,975,778	215,965	2,191,743	0	2,191,743
Salaries and Wages	147,808	(5,357) (14)	142,451	0	142,451
Office Supplies & Other Office Exp	72,002	(4,004) (15)	67,998	0	67,998
Regulatory Commission Exp.	61,841	(41,702) (16)	20,139	0	20,139
Pension & Other Benefits	161,182	45,872 (17)	207,054	0	207,054
Rent	22,222	0 (18)	22,222	0	22,222
Insurance	66,064	0 (19)	66,064	0	66,064
Office Utilities	172,712	0 (20)	172,712	0	172,712
Outside Services	51,922	0 (21)	51,922	0	51,922
Non-Utility Misc Income	0	0	-	0	-
Miscellaneous	7,191	(24,950) (22)	(17,759)	0	(17,759)
Total General Expenses	762,944	(30,141)	732,803	0	732,803
Depreciation	381,084	22,272 (23)	403,356	0	403,356
Amortization of CIAC	(6,917)	95 (24)	(6,822)	0	(6,822)
Taxes Other Than Income	595,630	303,626 (25)	899,256	5,265 (42)	904,521
Income Taxes - State	48,377	(26,902) (26)	21,475	47,991 (43)	69,466
Income Taxes - Federal	285,967	(200,283) (27)	85,684	191,484 (44)	277,168
Amortization of Excess ADIT Liability	0	(39,360) (B)	(39,360)	0	(39,360)
Sale of Utility Property	(5,714)	5,714 (28)	0	0	0
Amort. Investment Tax Credit	0	0	0	0	0
Amortization of PAA	1,564	0 (29)	1,564	0	1,564
Total Other Expenses	1,299,991	65,162	1,365,153	244,740	1,609,893
Total Operating Expenses	4,038,713	250,986	4,289,699	244,740	4,534,439
Net Operating Income	851,291	(17,679)	833,612	759,704	1,593,316
Customer Growth	0	3,473 (30)	3,473	3,165 (45)	6,638
Interest During Construction	(1,227)	1,227 (31)	0	0	0
Net Income (Loss) For Return	852,518	(15,433)	837,085	762,869	1,599,954
Original Cost Rate Base:					
Gross Plant In Service	21,172,722	345,700 (32)	21,518,422	0	21,518,422
Accumulated Depreciation	(2,943,316)	(35,802) (33)	(2,979,118)	0	(2,979,118)
Net Plant In Service	18,229,406	309,898	18,539,304	0	18,539,304
Deferred Charges	0	0	0	0	0
Cash Working Capital	342,340	23,228 (34)	365,568	0	365,568
Contributions In Aid of Construction	(340,937)	(1,566) (35)	(342,503)	0	(342,503)
Accumulated Deferred Income Taxes	(2,015,134)	761,699 (C)	(1,253,435)	0	(1,253,435)
Excess ADIT Liability - Protected	0	(667,907) (D)	(667,907)	0	(667,907)
Excess ADIT Liability - Unprotected	0	(54,432) (E)	(54,432)	0	(54,432)
Excess Tax Collection Liability	0	(213,624) (F)	(213,624)	0	(213,624)
Customer Deposits	(90,218)	0	(90,218)	0	(90,218)
Advances in Aid of Construction	0	0	0	0	0
Plant Acquisition Adjustment	(131,612)	0 (36)	(131,612)	0	(131,612)
Total Rate Base	15,993,845	157,296	16,151,141	0	16,151,141
Return on Rate Base	5.33%		5.18%		9.91%
Operating Margin	6.95%		6.36%		17.77%
Interest Expense	512,661	(1,383) (37)	511,278	0	511,278

Carolina Water Service, Inc.
Operating Experience, Rate Base and Rate of Return
Sewer Service Territory 1 and 2
Docket No. 2017-292-WS
Test Year Ended August 31, 2017

Description	(1) Application Per Books \$	(2) Accounting & Pro Forma Adjustments \$	(3) After Accounting & Pro Forma Present \$	(4) Proposed Increase \$	(5) After Proposed Increase \$
<u>Operating Revenues</u>					
Service Revenues - Sewer	10,602,605	(1,660,950) (2)	8,941,655	2,292,098 (39)	11,233,753
Miscellaneous Revenues	309,010	(46,450) (3)	262,560	21,694 (40)	284,254
Amortization of Excess Tax Collection	0	192,124 (A)	192,124	0	192,124
Uncollectible Accounts	(137,215)	21,868 (4)	(115,347)	(7,700) (41)	(123,047)
Total Operating Revenues	10,774,400	(1,493,408)	9,280,992	2,306,092	11,587,084
<u>Maintenance Expenses</u>					
Salaries and Wages	1,225,212	(112,294) (5)	1,112,918	0	1,112,918
Capitalized Time	(251,855)	21,821 (6)	(230,034)	0	(230,034)
Purchased Power	622,678	(75,032) (7)	547,646	0	547,646
Purchased Water and Sewer	1,030,187	(40) (8)	1,030,147	0	1,030,147
Maintenance and Repair	1,600,678	(231,608) (9)	1,369,070	0	1,369,070
Maintenance Testing	126,369	(8,831) (10)	117,538	0	117,538
Meter Reading	38,408	(25) (11)	38,383	0	38,383
Chemicals	271,166	(87,780) (12)	183,386	0	183,386
Transportation	96,751	(509) (13)	96,242	0	96,242
Operating Exp. Charged to Plant	0	0	0	0	-
Total Maintenance Expenses	4,759,594	(494,298)	4,265,296	0	4,265,296
Salaries and Wages	328,577	(63,847) (14)	264,730	0	264,730
Office Supplies & Other Office Exp	204,394	(108,580) (15)	95,814	0	95,814
Regulatory Commission Exp.	167,249	(126,308) (16)	40,941	0	40,941
Pension & Other Benefits	358,293	(11,458) (17)	346,835	0	346,835
Rent	2,476	(178) (18)	2,298	0	2,298
Insurance	146,840	(20,955) (19)	125,885	0	125,885
Office Utilities	256,165	(59,574) (20)	196,591	0	196,591
Outside Services	135,811	(8,435) (21)	127,376	0	127,376
Non-Utility Misc Income	0	0	-	0	-
Miscellaneous	16,045	(54,037) (22)	(37,992)	0	(37,992)
Total General Expenses	1,615,850	(453,372)	1,162,478	0	1,162,478
Depreciation	928,110	(108,525) (23)	819,585	0	819,585
Amortization of CIAC	(255,824)	21,868 (24)	(233,956)	0	(233,956)
Taxes Other Than Income	1,387,717	186,525 (25)	1,574,242	12,088 (42)	1,586,330
Income Taxes - State	71,991	(29,602) (26)	42,389	111,648 (43)	154,037
Income Taxes - Federal	436,114	(266,983) (27)	169,131	445,477 (44)	614,608
Amortization of Excess ADIT Liability	0	(61,035) (B)	(61,035)	0	(61,035)
Sale of Utility Property	(14,044)	14,044 (28)	0	0	0
Amort. Investment Tax Credit	(5,107)	0	(5,107)	0	(5,107)
Amortization of PAA	(5,189)	1,415 (29)	(3,774)	0	(3,774)
Total Other Expenses	2,543,768	(242,293)	2,301,475	569,213	2,870,688
Total Operating Expenses	8,919,212	(1,189,963)	7,729,249	569,213	8,298,462
Net Operating Income	1,855,188	(303,445)	1,551,743	1,736,879	3,288,622
Customer Growth	0	17,105 (30)	17,105	19,145 (45)	36,250
Interest During Construction	(51,077)	51,077 (31)	0	0	0
Net Income (Loss) For Return	1,906,265	(337,417)	1,568,848	1,756,024	3,324,872
<u>Original Cost Rate Base:</u>					
Gross Plant In Service	56,785,591	(7,078,413) (32)	49,707,178	0	49,707,178
Accumulated Depreciation	(8,141,111)	2,313,160 (33)	(5,827,951)	0	(5,827,951)
Net Plant In Service	48,644,480	(4,765,253)	43,879,227	0	43,879,227
Deferred Charges	0	0	0	0	0
Cash Working Capital	796,931	(118,459) (34)	678,472	0	678,472
Contributions In Aid of Construction	(12,616,347)	1,027,247 (35)	(11,589,100)	0	(11,589,100)
Accumulated Deferred Income Taxes	(3,486,834)	1,544,035 (C)	(1,942,799)	0	(1,942,799)
Excess ADIT Liability - Protected	0	(1,412,286) (D)	(1,412,286)	0	(1,412,286)
Excess ADIT Liability - Unprotected	0	(70,714) (E)	(70,714)	0	(70,714)
Excess Tax Collection Liability	0	(384,248) (F)	(384,248)	0	(384,248)
Customer Deposits	(149,510)	0	(149,510)	0	(149,510)
Advances in Aid of Construction	0	0	0	0	0
Plant Acquisition Adjustment	(121,504)	32,541 (36)	(88,963)	0	(88,963)
Total Rate Base	33,067,216	(4,147,137)	28,920,079	0	28,920,079
Return on Rate Base	5.76%		5.42%		11.50%
Operating Margin	10.69%		7.04%		20.79%
Interest Expense	754,572	160,918 (37)	915,490	0	915,490

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
<u>Accounting and Pro Forma Adjustments</u>				
<u>Operating Revenues</u>				
(1) Service Revenues - Water				
To adjust water service revenues to reflect test year customer billings.				
Per ORS	445,276	346,907	98,369	0
Per CWS	173,476	149,827	23,649	0
(2) Service Revenues - Sewer				
To adjust sewer service revenues to reflect test year customer billings.				
Per ORS	(1,660,950)	0	0	(1,660,950)
Per CWS	(1,692,502)	0	0	(1,692,502)
(3) Miscellaneous Revenues				
To adjust miscellaneous revenues for the test year.				
Per ORS	22,313	38,775	29,988	(46,450)
Per CWS	(17,433)	0	0	(17,433)
(A) Amortization of Excess Tax Collection				
To adjust revenue for the amortization of the excess tax collection liability created as a result of the Tax Cut and Jobs Act.				
Per ORS	422,475	123,539	106,812	192,124
Per CWS	0	0	0	0
(4) Uncollectible Accounts				
To adjust uncollectible accounts to reflect accounting and pro forma adjustments to service revenues.				
Per ORS	15,394	(4,612)	(1,862)	21,868
Per CWS	15,498	(2,078)	(466)	18,042
<u>Maintenance Expenses</u>				
(5) Salaries & Wages				
To annualize operators' salaries for the test year and account for the removal of the I-20 sewer system.				
Per ORS	134,298	147,974	98,618	(112,294)
Per CWS	67,880	68,588	51,935	(52,643)

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(6) Capitalized Time				
To adjust capitalized time based on pro-forma salaries and account for the removal of the I-20 sewer system.				
Per ORS	<u>(15,911)</u>	<u>(22,727)</u>	<u>(15,005)</u>	<u>21,821</u>
Per CWS	<u>(4,788)</u>	<u>(9,560)</u>	<u>(7,077)</u>	<u>11,849</u>
(7) Purchased Power				
To adjust purchased power for removal of I-20 facility.				
Per ORS	<u>(75,032)</u>	<u>0</u>	<u>0</u>	<u>(75,032)</u>
Per CWS	<u>(75,032)</u>	<u>0</u>	<u>0</u>	<u>(75,032)</u>
(8) Purchased Water and Sewer				
To adjust purchased water & sewer expense to reflect a going forward expense level.				
Per ORS	<u>598,804</u>	<u>507,467</u>	<u>91,377</u>	<u>(40)</u>
Per CWS	<u>587,002</u>	<u>484,280</u>	<u>102,762</u>	<u>(40)</u>
(9) Maintenance and Repair				
(9a) To increase maintenance and repair for deferred maintenance.				
Per ORS	(13)	4,696	3,404	(8,113)
Per CWS	8,100	4,696	3,404	0
(9b) To remove expenses associated with I-20 facility.				
Per ORS	(116,131)	0	0	(116,131)
Per CWS	(116,131)	0	0	(116,131)
(9c) To increase maintenance and repair for deferred purchased water expenses.				
Per ORS	191,034	153,245	37,789	0
Per CWS	230,386	186,306	44,080	0
(9d) To decrease maintenance and repair to normalize abnormal sludge hauling expense due to consent orders with DHEC.				
Per ORS	(96,892)	0	0	(96,892)
Per CWS	0	0	0	0

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(9e) To decrease maintenance and repair for reclassifying certain expenses to rate base.				
Per ORS	(10,472)	0	0	(10,472)
Per CWS	0	0	0	0
(9) Total Maintenance and Repair Per ORS	<u>(32,474)</u>	<u>157,941</u>	<u>41,193</u>	<u>(231,608)</u>
Total Maintenance and Repair Per CWS	<u>122,355</u>	<u>191,002</u>	<u>47,484</u>	<u>(116,131)</u>
(10) Maintenance Testing				
To remove expenses associated with I-20 facility.				
Per ORS	<u>(8,831)</u>	<u>0</u>	<u>0</u>	<u>(8,831)</u>
Per CWS	<u>(8,831)</u>	<u>0</u>	<u>0</u>	<u>(8,831)</u>
(11) Meter Reading				
To remove expenses associated with I-20 facility.				
Per ORS	<u>(25)</u>	<u>0</u>	<u>0</u>	<u>(25)</u>
Per CWS	<u>(25)</u>	<u>0</u>	<u>0</u>	<u>(25)</u>
(12) Chemicals				
To remove expenses associated with I-20 facility.				
Per ORS	<u>(87,780)</u>	<u>0</u>	<u>0</u>	<u>(87,780)</u>
Per CWS	<u>(87,780)</u>	<u>0</u>	<u>0</u>	<u>(87,780)</u>
(13) Transportation				
(13a) To remove expenses associated with I-20 facility.				
Per ORS	(26)	0	0	(26)
Per CWS	(26)	0	0	(26)
(13b) To remove expenses associated with sale of utility property.				
Per ORS	(1,039)	(338)	(218)	(483)
Per CWS	0	0	0	0
(13) Total Transportation Per ORS	<u>(1,065)</u>	<u>(338)</u>	<u>(218)</u>	<u>(509)</u>
Total Transportation Per CWS	<u>(26)</u>	<u>0</u>	<u>0</u>	<u>(26)</u>

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
General Expenses				
(14) Salaries & Wages				
To annualize office salaries for the test year.				
Per ORS	(72,820)	(3,616)	(5,357)	(63,847)
Per CWS	(34,819)	(7,503)	(7,871)	(19,445)
(15) Office Supplies & Other Office Expense				
(15a) To remove nonrecoverable items.				
Per ORS	(95,241)	(1)	(4,004)	(91,236)
Per CWS	(95,241)	(1)	(4,004)	(91,236)
(15b) To remove expenses associated with I-20 facility.				
Per ORS	(17,344)	0	0	(17,344)
Per CWS	(17,344)	0	0	(17,344)
(15) Total Office Supplies & Other Office Expense Per ORS	(112,585)	(1)	(4,004)	(108,580)
Total Office Supplies & Other Office Expense Per CWS	(112,585)	(1)	(4,004)	(108,580)
(16) Regulatory Commission Expense				
To amortize current and unamortized prior rate case expenses over a three-year period.				
Per ORS	(229,367)	(61,357)	(41,702)	(126,308)
Per CWS	(133,357)	(31,154)	(33,388)	(68,815)
(17) Pension & Other Benefits				
To annualize pension and other benefits associated with pro-forma salaries.				
Per ORS	55,633	21,219	45,872	(11,458)
Per CWS	81,636	22,950	50,302	8,384
(18) Rent				
To remove expenses associated with I-20 facility.				
Per ORS	(178)	0	0	(178)
Per CWS	(178)	0	0	(178)
(19) Insurance				
To remove expenses associated with I-20 facility.				
Per ORS	(20,955)	0	0	(20,955)
Per CWS	(20,955)	0	0	(20,955)

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(20) Office Utilities				
To remove expenses associated with I-20 facility.				
Per ORS	<u>(59,574)</u>	<u>0</u>	<u>0</u>	<u>(59,574)</u>
Per CWS	<u>(59,574)</u>	<u>0</u>	<u>0</u>	<u>(59,574)</u>
(21) Outside Services				
To remove expenses associated with I-20 facility.				
Per ORS	<u>(8,435)</u>	<u>0</u>	<u>0</u>	<u>(8,435)</u>
Per CWS	<u>(8,435)</u>	<u>0</u>	<u>0</u>	<u>(8,435)</u>
(22) Miscellaneous				
(22a) To remove expenses associated with I-20 facility.				
Per ORS	(844)	0	0	(844)
Per CWS	(844)	0	0	(844)
(22b) To remove additional non-allowable expenses identified by ORS.				
Per ORS	(113,837)	(35,694)	(24,950)	(53,193)
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(22) Total Miscellaneous Per ORS	<u>(114,681)</u>	<u>(35,694)</u>	<u>(24,950)</u>	<u>(54,037)</u>
Total Miscellaneous Per CWS	<u>(844)</u>	<u>0</u>	<u>0</u>	<u>(844)</u>
(23) Depreciation Expense				
To annualize depreciation expense for known and measurable plant in service including extraordinary retirements. See Audit Exhibit ZJP-6.				
Per ORS	<u>(83,079)</u>	<u>3,174</u>	<u>22,272</u>	<u>(108,525)</u>
Per CWS	<u>(73,958)</u>	<u>18,316</u>	<u>(18,873)</u>	<u>(73,401)</u>
(24) Amortization of Contributions in Aid of Construction (CIAC)				
To annualize the amortization of CIAC expense. See Audit Exhibit ZJP-6.				
Per ORS	<u>10,505</u>	<u>(11,458)</u>	<u>95</u>	<u>21,868</u>
Per CWS	<u>14,935</u>	<u>(12,020)</u>	<u>86</u>	<u>26,869</u>
(25) Taxes Other Than Income				
(25a) To adjust payroll taxes associated with adjusted salaries.				
Per ORS	28,888	10,117	16,723	2,048
Per CWS	32,858	5,106	13,879	13,873

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(25b) To adjust gross receipts and utility/commission taxes after the accounting and pro forma adjustments using a factor of .00524169.				
Per ORS	26,002	8,414	6,316	11,272
Per CWS	(8,198)	809	128	(9,135)
(25c) To adjust for pro-forma property taxes.				
Per ORS	286,173	(404,591)	280,587	410,177
Per CWS	25,627	64,475	32,709	(71,557)
(25d) To remove other taxes associated with I-20 facility.				
Per ORS	(236,972)	0	0	(236,972)
Per CWS	0	0	0	0
(25) Total Taxes Other Than Income Per ORS	<u>104,091</u>	<u>(386,060)</u>	<u>303,626</u>	<u>186,525</u>
Total Taxes Other Than Income Per CWS	<u>50,287</u>	<u>70,390</u>	<u>46,716</u>	<u>(66,819)</u>
(26) Income Taxes - State				
To adjust state income taxes after accounting and pro forma adjustments. See Audit Exhibit ZJP-7.				
Per ORS	<u>(96,502)</u>	<u>(39,998)</u>	<u>(26,902)</u>	<u>(29,602)</u>
Per CWS	<u>(160,063)</u>	<u>(84,035)</u>	<u>(25,332)</u>	<u>(50,696)</u>
(27) Income Taxes - Federal				
To adjust federal income taxes after accounting and pro forma adjustments. See Audit Exhibit ZJP-7.				
Per ORS	<u>(750,583)</u>	<u>(283,317)</u>	<u>(200,283)</u>	<u>(266,983)</u>
Per CWS	<u>(957,190)</u>	<u>(529,970)</u>	<u>(132,717)</u>	<u>(294,503)</u>
(B) Amortization of Excess ADIT Liability				
To adjust for the amortization of the excess ADIT liability.				
Per ORS	<u>(136,924)</u>	<u>(36,529)</u>	<u>(39,360)</u>	<u>(61,035)</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(28) Sale of Utility Property				
To reflect the removal of sale of utility property for ratemaking purposes.				
Per ORS	<u>29,323</u>	<u>9,565</u>	<u>5,714</u>	<u>14,044</u>
Per CWS	<u>29,323</u>	<u>9,565</u>	<u>5,714</u>	<u>14,044</u>

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(29) Amortization of Plant Acquisition Adjustment ("PAA")				
To adjust the amortization of the PAA.				
Per ORS	<u>1,756</u>	<u>341</u>	<u>0</u>	<u>1,415</u>
Per CWS	<u>341</u>	<u>341</u>	<u>0</u>	<u>0</u>
(30) Customer Growth				
To adjust for customer growth after the accounting and pro forma adjustments. The growth factors of 1.5662% for water territory 1, 0.4166% for water territory 2, and 1.1023% for sewer were computed by the Utility Rates Department.				
Per ORS	<u>28,803</u>	<u>8,225</u>	<u>3,473</u>	<u>17,105</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(31) Interest During Construction ("IDC")				
To eliminate IDC for rate making purposes.				
Per ORS	<u>89,608</u>	<u>37,304</u>	<u>1,227</u>	<u>51,077</u>
Per CWS	<u>89,608</u>	<u>37,304</u>	<u>1,227</u>	<u>51,077</u>
(32) Gross Plant in Service				
(32a) To adjust plant in service for changes in allocations and service lives of vehicles and computers.				
Per ORS	(84,429)	86,378	111,346	(282,153)
Per CWS	0	(24,798)	45,267	(20,469)
(32b) To adjust for excess book value per prior Commission orders.				
Per ORS	(1,937,905)	(930,194)	0	(1,007,711)
Per CWS	(493,722)	(208,836)	0	(284,886)
(32c) To adjust for pro-forma general ledger additions, pro-forma plant, and pro-forma retirements.				
Per ORS	2,922,554	1,301,683	234,354	1,386,517
Per CWS	2,742,356	965,253	229,046	1,548,057
(32d) To adjust for the removal of DHEC consent order consulting.				
Per ORS	(306,552)	0	0	(306,552)
Per CWS	0	0	0	0

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(32e) To adjust gross plant in service for removal of I-20 facility.				
Per ORS	(6,868,514)	0	0	(6,868,514)
Per CWS	(6,868,514)	0	0	(6,868,514)
(32) Total Gross Plant in Service Per ORS	(6,274,846)	457,867	345,700	(7,078,413)
Total Gross Plant in Service Per CWS	(4,619,880)	731,619	274,313	(5,625,812)
(33) Accumulated Depreciation				
(33a) To adjust accumulated depreciation for current depreciation, vehicles, computers, and prior rate case adjustments.				
Per ORS	453,963	(8,158)	(35,802)	497,923
Per CWS	245,171	135,339	(99,028)	208,860
(33b) To adjust accumulated depreciation for excess book value.				
Per ORS	1,417,544	680,421	0	737,123
Per CWS	0	0	0	0
(33c) To adjust accumulated depreciation for removal of I-20 facility.				
Per ORS	1,078,114	0	0	1,078,114
Per CWS	1,078,114	0	0	1,078,114
(33) Total Accumulated Depreciation Per ORS	2,949,621	672,263	(35,802)	2,313,160
Total Accumulated Depreciation Per CWS	1,323,285	135,339	(99,028)	1,286,974
(34) Cash Working Capital				
To adjust cash working capital after accounting and pro forma adjustments. See Audit Exhibit ZJP-8.				
Per ORS	(6,372)	88,859	23,228	(118,459)
Per CWS	38,664	89,825	25,018	(76,179)
(35) Contributions in Aid of Construction ("CIAC")				
To adjust CIAC to reflect the amortization of CIAC expense, pro-forma CIAC additions, and the removal of I-20 CIAC. See Audit Exhibit ZJP-6.				
Per ORS	732,675	(293,006)	(1,566)	1,027,247
Per CWS	1,377,162	5,128	30	1,372,004
(C) Accumulated Deferred Income Tax ("ADIT")				
To adjust ADIT for the creation of an excess ADIT liability resulting from lower federal tax rates.				
Per ORS	3,229,909	924,175	761,699	1,544,035
Per CWS	0	0	0	0

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(D) Excess ADIT Liability - Protected				
To adjust rate base for the creation of an excess ADIT liability for protected assets resulting from lower federal tax rates.				
Per ORS	<u>(2,925,519)</u>	<u>(845,326)</u>	<u>(667,907)</u>	<u>(1,412,286)</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(E) Excess ADIT Liability - Unprotected				
To adjust rate base for the creation of an excess ADIT liability for unprotected assets resulting from lower federal tax rates.				
Per ORS	<u>(167,466)</u>	<u>(42,320)</u>	<u>(54,432)</u>	<u>(70,714)</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(F) Excess Tax Collection Liability				
To adjust rate base for the creation of an excess tax collection liability resulting from lower federal tax rates.				
Per ORS	<u>(844,950)</u>	<u>(247,078)</u>	<u>(213,624)</u>	<u>(384,248)</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(36) Plant Acquisition Adjustment ("PAA")				
To adjust the PAA to reflect the removal of the I-20 facility.				
Per ORS	<u>32,541</u>	<u>0</u>	<u>0</u>	<u>32,541</u>
Per CWS	<u>32,541</u>	<u>0</u>	<u>0</u>	<u>32,541</u>
(37) Interest Expense				
To adjust interest on debt using a 48.11% and 51.89% debt to equity ratio and 6.58% cost of debt. ORS computed allowable interest expense after accounting and pro forma adjustments. See Audit Exhibit ZJP-9.				
Per ORS	<u>(60,934)</u>	<u>(220,469)</u>	<u>(1,383)</u>	<u>160,918</u>
Per CWS	<u>(10,737)</u>	<u>(211,875)</u>	<u>1,471</u>	<u>199,667</u>
<u>Proposed Increase</u>				
(38) Service Revenues - Water				
To adjust water service revenues for ORS's recalculation of the Company's proposed rate increase.				
Per ORS	<u>2,394,421</u>	<u>1,376,052</u>	<u>1,018,369</u>	<u>0</u>
Per CWS	<u>2,312,034</u>	<u>1,317,240</u>	<u>994,794</u>	<u>0</u>

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(39) Service Revenues - Sewer				
To adjust sewer service revenues for ORS's recalculation of the Company's proposed rate increase.				
Per ORS	<u>2,292,098</u>	<u>0</u>	<u>0</u>	<u>2,292,098</u>
Per CWS	<u>2,284,616</u>	<u>0</u>	<u>0</u>	<u>2,284,616</u>
(40) Miscellaneous Revenues				
To adjust miscellaneous revenues for ORS's recalculation of the Company's proposed rate increase.				
Per ORS	<u>35,576</u>	<u>5,679</u>	<u>8,203</u>	<u>21,694</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(41) Uncollectible Accounts				
To adjust for uncollectible accounts associated with the Company's proposed rate increase.				
Per ORS	<u>(53,292)</u>	<u>(23,464)</u>	<u>(22,128)</u>	<u>(7,700)</u>
Per CWS	<u>(85,236)</u>	<u>(17,693)</u>	<u>(21,426)</u>	<u>(46,117)</u>
(42) Taxes Other Than Income				
To adjust gross receipts and utility/commission taxes associated with the Company's proposed increase using a factor of .00524169.				
Per ORS	<u>24,473</u>	<u>7,120</u>	<u>5,265</u>	<u>12,088</u>
Per CWS	<u>24,810</u>	<u>7,110</u>	<u>5,369</u>	<u>12,331</u>
(43) Income Taxes -State				
To adjust state income taxes associated with the Company's proposed increase. See Audit Exhibit ZJP-7.				
Per ORS	<u>225,370</u>	<u>65,731</u>	<u>47,991</u>	<u>111,648</u>
Per CWS	<u>224,330</u>	<u>64,622</u>	<u>48,400</u>	<u>111,308</u>

Carolina Water Service, Inc.
Explanation of Accounting and Pro Forma Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
(44) Income Taxes - Federal				
To adjust federal income taxes associated with the Company's proposed increase. See Audit Exhibit ZJP-7.			\$	
Per ORS	<u>899,227</u>	<u>262,266</u>	<u>191,484</u>	<u>445,477</u>
Per CWS	<u>1,491,795</u>	<u>429,735</u>	<u>321,859</u>	<u>740,201</u>
(45) Customer Growth				
To adjust for customer growth after proposed increase. The growth factors of 1.5662% for water territory 1, 0.4166% for water territory 2, and 1.1023% for sewer were computed by the Utility Rates Department.				
Per ORS	<u>38,335</u>	<u>16,025</u>	<u>3,165</u>	<u>19,145</u>
Per CWS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Carolina Water Service, Inc.
Depreciation and Amortization Expense Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

	Combined Operations \$	Water Terr. 1 Operations \$	Water Terr. 2 Operations \$	Sewer Operations \$
<u>Depreciation Expense</u>				
Gross Plant @ 8-31-17	101,446,033	23,487,720	21,172,723	56,785,590
Add:				
ORS Net Plant Additions Adjustment	(6,274,846)	457,867	345,700	(7,078,413)
Less:				
Organization @ 8/31/17	334,859	84,616	213,814	36,429
Land @ 8/31/17	702,610	325,067	271,444	106,099
Engineering Expenses over 10 years (Ends 2026)	28,264	0	0	28,264
Vehicles @ 2/12/18 (ORS Adjusted Per Books)	1,782,232	577,034	446,046	759,152
Computers @ 2/12/18 (ORS Adjusted Per Books)	3,474,416	1,219,711	788,782	1,465,923
Net Plant @ 2/12/18	88,848,806	21,739,159	19,798,337	47,311,310
Plant Depreciation @ 1.5% (66.67 years)	1,332,732	326,087	296,975	709,670
Vehicles @ 2/12/18	1,782,232	577,034	446,046	759,152
Less: Fully Depreciated Vehicles	1,019,584	336,746	256,508	426,330
Net Vehicles @ 2/12/18	762,648	240,288	189,538	332,822
Vehicle Depreciation @ 20.00% (5 years)	152,530	48,058	37,908	66,564
Computers @ 2/12/18	3,474,416	1,219,711	788,782	1,465,923
Less: Fully Depreciated Computers	2,706,042	949,970	614,342	1,141,730
Net Computers @ 2/12/18	768,374	269,741	174,440	324,193
Computer Depreciation @ 12.5% (8 years)	96,048	33,718	21,805	40,525
Indian Pines Extraordinary Retirement (Ends 2029)	54,441	54,441	0	0
Indian Pines Depr. @ 6.67% (15 years)	3,631	3,631	0	0
Purdy Shores & Foxwood Retirement (Ends 2024)	466,682	0	466,682	0
PS & Foxwood @ 10% (10 years)	46,668	0	46,668	0
Engineering Expenses over 10 Years (Ends 2026)	28,264	0	0	28,264
Engineering Expense Depr. @ 10.00% (10 years)	2,826	0	0	2,826
ORS Total Depreciation	1,634,435	411,494	403,356	819,585
Less: Per Books Depreciation	1,717,514	408,320	381,084	928,110
ORS Depreciation Adjustment # 23	(83,079)	3,174	22,272	(108,525)
Company's Adjustment	(73,959)	18,316	(18,873)	(73,402)

Carolina Water Service, Inc.
Depreciation and Amortization Expense Adjustments
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

	Combined Operations \$	Water Terr. 1 Operations \$	Water Terr. 2 Operations \$	Sewer Operations \$
<u>Amortization of CIAC Adjustment</u>				
Gross CIAC @ 8/31/17	(28,342,338)	(10,700,360)	(453,420)	(17,188,558)
Remove I-20 WWTP Gross CIAC	1,913,189	0	0	1,913,189
Pro Forma CIAC Additions (as of 2/12/18)	(627,585)	(304,465)	(1,470)	(321,650)
ORS Adjusted Gross CIAC	<u>(27,056,734)</u>	<u>(11,004,825)</u>	<u>(454,890)</u>	<u>(15,597,019)</u>
Accumulated Amortization of CIAC @ 8/31/17	6,679,540	1,994,846	112,482	4,572,212
Remove I-20 WWTP CIAC Accumulated Amortization	(542,425)	0	0	(542,425)
ORS Amortization Adjustment #24	(10,505)	11,458	(95)	(21,868)
ORS Adjusted CIAC Accumulated Amortization	<u>6,126,610</u>	<u>2,006,304</u>	<u>112,387</u>	<u>4,007,919</u>
ORS Adjusted Net CIAC	<u>(20,930,124)</u>	<u>(8,998,521)</u>	<u>(342,503)</u>	<u>(11,589,100)</u>
Less: Per books CIAC	<u>(21,662,799)</u>	<u>(8,705,515)</u>	<u>(340,937)</u>	<u>(12,616,347)</u>
ORS Net CIAC Adjustment # 35	<u>732,675</u>	<u>(293,006)</u>	<u>(1,566)</u>	<u>1,027,247</u>
CIAC Amortization @ 1.5% (66.67 years)	(405,851)	(165,072)	(6,823)	(233,956)
Less: Per Books Amortization of CIAC	<u>(416,356)</u>	<u>(153,614)</u>	<u>(6,918)</u>	<u>(255,824)</u>
ORS CIAC Amortization Adjustment # 24	<u>10,505</u>	<u>(11,458)</u>	<u>95</u>	<u>21,868</u>
Company's Adjustment	<u>14,935</u>	<u>(12,020)</u>	<u>86</u>	<u>26,869</u>
<u>Amortization of PAA Adjustment</u>				
Gross PAA @ 2/12/18	(1,024,823)	(877,546)	104,292	(251,569)
PAA Amortization @ 1.5% (66.67 years)	(15,373)	(13,163)	1,564	(3,774)
Less: Per Books Amortization of PAA	<u>(17,129)</u>	<u>(13,504)</u>	<u>1,564</u>	<u>(5,189)</u>
ORS Amortization of PAA Adjustment #29	<u>1,756</u>	<u>341</u>	<u>0</u>	<u>1,415</u>

Audit Surrebuttal Exhibit ZJP-7

Carolina Water Service, Inc.
 Computation of Income Taxes
 Docket No. 2017-292-WS
 For the Test Year Ended August 31, 2017

After Accounting & Pro Forma Adjustments				
	\$ Combined Operations	Water Terr. 1 Operations	Water Terr. 2 Operations	\$ Sewer Operations
Operating Revenues	20,364,147	5,959,844	5,123,311	9,280,992
Less: Operating Expenses	17,048,270	5,348,001	4,182,540	7,517,729
Net Operating Income Before Taxes	3,315,877	611,843	940,771	1,763,263
Less: Annualized Interest Expense	1,691,277	264,509	511,278	915,490
Taxable Income - State	1,624,600	347,334	429,493	847,773
State Income Tax %	5.0%	5.0%	5.0%	5.0%
State Income Taxes	81,231	17,367	21,475	42,389
Less: State Income Taxes Per Book	177,733	57,365	48,377	71,991
ORS State Income Tax Adjustment #23	(96,502)	(39,998)	(26,902)	(29,602)
Taxable Income - Federal	1,543,369	329,967	408,018	805,384
Federal Income Taxes %	21.0%	21.0%	21.0%	21.0%
Federal Income Taxes	324,108	69,293	85,684	169,131
Less: Federal Income Taxes Per Book	1,074,691	352,610	285,967	436,114
ORS Federal Income Tax Adjustment #24	(750,583)	(283,317)	(200,283)	(266,983)
After Applicant's Proposed Increase				
	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
Operating Revenues	25,032,950	7,318,111	6,127,755	11,587,084
Less: Operating Expenses	17,209,667	5,391,650	4,227,165	7,590,852
Net Operating Income Before Taxes	7,823,283	1,926,461	1,900,590	3,996,232
Less: Annualized Interest Expense	1,691,277	264,509	511,278	915,490
Taxable Income - State	6,132,006	1,661,952	1,389,312	3,080,742
State Income Tax %	5.0%	5.0%	5.0%	5.0%
State Income Taxes	306,601	83,098	69,466	154,037
Less: State Income Taxes As Adjusted	81,231	17,367	21,475	42,389
ORS State Income Tax Adjustment #43	225,370	65,731	47,991	111,648
Taxable Income - Federal	5,825,405	1,578,854	1,319,846	2,926,705
Federal Income Taxes %	21.0%	21.0%	21.0%	21.0%
Federal Income Taxes	1,223,335	331,559	277,168	614,608
Less: Federal Income Taxes As Adjusted	324,108	69,293	85,684	169,131
ORS Federal Income Tax Adjustment #44	899,227	262,266	191,484	445,477

Audit Surrebuttal Exhibit Z,JP-8

Carolina Water Service, Inc.
Cash Working Capital Allowance
Docket No. 2017-292-WS
For the Test Year Ended August 31, 2017

After Accounting & Pro Forma Adjustments				
Description	\$ Combined Operations	\$ Water Terr. 1 Operations	\$ Water Terr. 2 Operations	\$ Sewer Operations
Maintenance Expenses	10,062,079	3,605,040	2,191,743	4,265,296
General Expenses	2,889,520	994,239	732,803	1,162,478
Total Expenses for Computation	12,951,599	4,599,279	2,924,546	5,427,774
Allowable Rate	12.50%	12.50%	12.50%	12.50%
Computed Cash Working Capital	1,618,950	574,910	365,568	678,472
Less: Cash Working Capital - Application Per Books	1,625,322	486,051	342,340	796,931
ORS Cash Working Capital Adjustment #34	(6,372)	88,859	23,228	(118,459)
Company's Cash Working Capital Adjustment	38,664	89,825	25,018	(76,179)

Carolina Water Service, Inc.
Return on Equity
Docket No. 2017-292-WS
Capital Structure at August 31, 2017

Combined Operations

Description	(Note) Capital Structure	Ratio	Application Per Books (Note 1)			After Accounting and Pro forma Adjustments			After Applicant's Proposed Increase		
			Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return
Long-Term Debt	\$ 221,748,924	48.11%	\$ 27,278,598	6.58%	3.17%	\$ 25,703,307	6.58%	3.17%	\$ 25,703,307	6.58%	3.17%
Common Equity	239,179,224	51.89%	29,422,799	3.36%	1.74%	988,315	4.50%	2.34%	27,723,683	17.34%	9.00%
Totals	\$ 460,928,148	100.00%	\$ 56,701,397		4.91%	\$ 2,783,247		5.51%	\$ 53,426,990		12.17%

Water Terr. 1 Operations

Description	Capital Structure	Ratio	Application Per Books (Note 1)			After Accounting and Pro forma Adjustments			After Applicant's Proposed Increase		
			Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return
Long-Term Debt	\$ 221,748,924	48.11%	\$ 3,675,706	6.58%	3.17%	\$ 4,019,896	6.58%	3.17%	\$ 4,019,896	6.58%	3.17%
Common Equity	239,179,224	51.89%	3,964,630	-5.48%	-2.84%	(217,397)	6.20%	3.22%	4,335,874	30.17%	15.66%
Totals	\$ 460,928,148	100.00%	\$ 7,640,336		0.33%	\$ 24,464		6.39%	\$ 8,355,770		18.83%

Water Terr. 2 Operations

Description	Capital Structure	Ratio	Application Per Books (Note 1)			After Accounting and Pro forma Adjustments			After Applicant's Proposed Increase		
			Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return
Long-Term Debt	\$ 221,748,924	48.11%	\$ 7,694,514	6.58%	3.17%	\$ 506,299	6.58%	3.17%	\$ 7,770,188	6.58%	3.17%
Common Equity	239,179,224	51.89%	8,299,331	4.17%	2.16%	346,219	3.89%	2.02%	8,380,953	12.99%	6.74%
Totals	\$ 460,928,148	100.00%	\$ 15,993,845		5.33%	\$ 852,518		5.19%	\$ 16,151,141		9.91%

Sewer Operations

Description	Capital Structure	Ratio	Application Per Books (Note 1)			After Accounting and Pro forma Adjustments			After Applicant's Proposed Increase		
			Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return	Rate Base	Embedded Cost/Return	Overall Cost/Return
Long-Term Debt	\$ 221,748,924	48.11%	\$ 15,908,379	6.58%	3.17%	\$ 1,046,771	6.58%	3.17%	\$ 13,913,224	6.58%	3.17%
Common Equity	239,179,224	51.89%	17,158,837	5.01%	2.60%	859,494	4.35%	2.26%	15,006,855	16.06%	8.33%
Totals	\$ 460,928,148	100.00%	\$ 33,067,216		5.77%	\$ 1,906,265		5.43%	\$ 28,920,079		11.50%

Note 1: The interest expense calculations reflect ORS's capital structure ratios and cost of debt applied to the Company's per book numbers.